

U.S.S.N. 10/657,452

2

PD-980042D

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1. (Withdrawn) A communications system comprising:
a first deployment of a plurality of satellites deployed in a medium earth orbit on an equatorial plane;
a second deployment of a plurality of satellites deployed in the medium earth orbit on the equatorial plane interleaved with said first deployment.
2. (Withdrawn) A communications system as recited in claim 1 wherein said medium earth orbit is substantially about 15000 km above the earth.
3. (Withdrawn) A communications system as recited in claim 1 wherein said first deployment reuses the same frequencies as geostationary satellites.
4. (Withdrawn) A communications system as recited in claim 1 wherein said second deployment reuses the same frequencies as geostationary satellites.
5. (Withdrawn) A communications system as recited in claim 1 further comprising a third deployment of satellites deployed on an orbit inclined with respect to the equatorial plane.
6. (Withdrawn) A communications system as recited in claim 5 wherein said third deployment reuses the same frequencies as geostationary satellites.
7. (Withdrawn) A satellite constellation as recited in claim 1 wherein said satellites communicate at c, ku or ka bands.

BEST AVAILABLE COPY

U.S.S.N. 10/657,452

3

PD-980042D

8. (Currently Amended) A communication system for mobile and fixed service users, comprising:

at least four satellites in a medium earth orbit spaced in a first configuration to provide semi-global coverage.;

~~at least one a first~~ ground terminal having a fixed one-dimensional antenna; and
~~at least one a second~~ ground terminal having a two-dimensional tracking antenna.

9. (Original) A communication system as recited in claim 8 wherein said at least four satellites are position-adjustable satellites that are spaced apart such that subsequently deployed satellites can be interleaved therebetween.

10. (Currently Amended) A communication system as recited in claim 8 wherein said first or second ~~at least one~~ ground terminal provides tracking and communication control at a fixed site.

11. (Currently Amended) A communication system as recited in claim 8 wherein said first or second ~~at least one~~ ground terminal provides network operational control for various communications.

12. (Currently Amended) A communication system as recited in claim 8 wherein said first or second ~~at least one~~ ground terminal provides satellite position control at a fixed site.

13. (Currently Amended) A communication system as recited in claim 8 wherein said first or second ~~at least one~~ ground terminal is coupled to a terrestrial communications link.

14. (Original) A communication system as recited in claim 13 wherein the terrestrial communications link is a phone line.

BEST AVAILABLE COPY

U.S.S.N. 10/657,452

4

PD-980042D

15. (Original) A communication system as recited in claim 13 wherein the terrestrial communications link is a cable/television line.

16. (Original) A communication system as recited in claim 9, further comprising a second plurality of satellites interleaved between said at least four satellites to increase the elevation angle at the most populated elevations.

17. (Original) A communication system as recited in claim 9, further comprising at least one additional satellite deployed in a medium earth orbit and positioned between two adjacent satellites of the at least four satellites.

18. (Original) A communication system as recited in claim 17, further comprising additional satellites in an inclined medium earth orbit.

19. (Canceled)

20. (Original) A communication system as recited in claim 8, wherein said at least four satellites are in the equatorial plane.

BEST AVAILABLE COPY